October 24, 2012

DEQ Comments
on CDM Powerpoint
on Site-Level Recontamination Evaluation Framework

GENERAL COMMENTS

We need to be clear on when doing an RE is appropriate and when it is not. It is important to encourage RPs to follow the JSCS and DEQ's SW Guidance, both of which require multiple lines of evidence, rather than skipping ahead to RE as a prediction that can be relied on for regulatory purposes for no further action at a site.

We need to develop information that ties an RE/LA into risk-based values.

DEQ was expecting to see specific protocols lined out for a clear communication to RPs as to expectations on how to complete an RE. Our discussions likened this to a QAP, defining how much and what quality of data are needed. Would building from DEQ's Modeling Issues for Consideration be a good starting place? We should also be clear about the DEQ or EPA lead on directing the RE work.

We also talked about the need for a more robust approach, but that doesn't come across clearly in the ppt.

Since most EAs and high priority upland sites are moving into or implementing design, has the boat sailed for predictive modeling? Should we even continue to pursue standardized protocols for doing model-based REs?

SPECIFIC COMMENTS

Slide 2 and notes: Per our jointly developed objectives discussed on conference calls Dec 2011 and Mar 2012, RE should consider all pathways. RE for DEQ's upland source control work to date has focused on SW (& erodible soils) & GW. Models needed for GW RE predictions will be different than those looked at to date for SW (SEDCAM, CORMIX, SWMM).

Slide 4 and notes: For CERCLA, post-remedy recontamination of sediment is the driving concern. Water column impairment should be considered if the CoCs can change form (e.g., precipitate, settle, convert from dissolved) to recontaminate sediment. Otherwise, water column impairment is addressed in CWA forum (e.g., TMDLs, NPDES).

Slide 5 and notes: For both site-wide and site-specific REs, all applicable upland and river processes should be considered. DEQ's work will look only at upland contributions (through all potential pathways – stormwater (including erodible soils & air deposition) and GW) and EPA's charge is in-water (bank sloughing, upstream bedload, remedy related disturbances like dredging).

Slides 22 & 23: Deposition area size should be in the sensitivity analysis, since it seems highly influencing. Decay rate is probably not going to be used (assumed 0) as a model input. It's difficult to determine, esp. for a variety of CoCs and how they might interact. It is more conservative to simplify the model and assume a zero decay rate.

Slide 25: When is the endpoint for refining and re-running. The flow chart could have an endless do loop at the refine the model portion. This will be unsatisfying to RPs who are looking to use the RE as a support for completion of action on their part. I guess we need to better understand what "incorporate uncertainty in a rigorous way" means.

Slides 28 – 32: The "more detailed analysis" section seems a little vague. We need to have some specific direction of what tools are useful for what deficiencies and how to use them. Requesting a more detailed analysis can turn into a time and money pit without certain resolution.